

A NEW LARVAL HOST RECORD (FAMILY PERIPLOCACEAE) FOR THREE LEPIDOPTERA IN NORTHERN AUSTRALIA

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Abstract

Three species of Lepidoptera have been collected from, and successfully reared on *Gymnanthera nitida* R. Br. (Periplocaceae): *Euclasta maceratalis* Lederer (Pyralidae), *Rhodogastria rubripes* (Walker) (Arctiidae) and *Agathia* sp. (Undescribed species) (Geometridae). This is the first recorded host for these species.

The Queensland Department of Lands is currently engaged in a biological control program against the introduced tropical weed *Cryptostegia grandiflora* R.Br. (Periplocaceae), commonly called rubber vine. When determining the host-specificity of potential biological control agents, it is important to test native plants belonging to the same plant family.

Gymnanthera nitida R.Br. and the recently described *G. fruticosa* Wilson are the only currently described species native to Australia in the family Periplocaceae. *G. fruticosa* is an erect shrub found in sandy or gravelly creek beds north of Alice Springs while *G. nitida* is a clambering vine common in coastal and riverine rainforest, mangrove edges, and humid vine scrubs from the Kimberleys in Western Australia to south of Maryborough in Queensland. *G. nitida* also occurs in Malaysia and Southeast Asia (McFadyen and Turnour unpubl. rept.).

During studies on the insects associated with *G. nitida* the following 3 species of Lepidoptera were reared.

(a) *Euclasta maceratalis* Lederer, Pyralidae

Adults reared from eggs and larvae collected on *G. nitida* from Macrossan Crossing, Burdekin River, northern Queensland, May-June 1987. Adults collected by sweep net on *G. nitida*, amongst surrounding couch grass, attracted to insect blacklight trap.

(b) *Rhodogastria rubripes* (Walker), Arctiidae

Adults reared from larvae and eggs collected from both *G. nitida* and *C. grandiflora* at Macrossan Crossing, Burdekin River, northern Queensland, May-June 1987.

(c) *Agathia* sp. (undescribed species), Geometridae

Adults reared from larvae collected from *G. nitida* at Lee Point and Buffalo Creek, Darwin, May 1987, and from Macrossan Crossing, Burdekin River, northern Queensland in June 1987. This species was previously only known from the Northern Territory (E.D. Edwards, pers. comm.).

Discussion

The larval host plants of these three species were previously unknown (I.F.B. Common, pers. comm.). The only other host record is *Beaumontia* (Apocynaceae) for *Rhodogastria astreus* Drury in Malaya. (Barlow 1982).

G. nitida is not known to occur south of Maryborough, Queensland, but *R. rubripes* has been recorded as far south as Lismore, in New South Wales. It is therefore likely that this insect also has other host plants, probably in the related families Apocynaceae or Asclepiadaceae. The distribution of *Euclasta maceratalis* is from N.E. and E. Australia (Cooktown, Cedar Bay, Townsville, Rockhampton, Geraldton, Duarina, Brisbane, Pt. Darwin) (Popescu-Gorj and Constantinescu 1977). The distribution of the *Agathia* sp. is not known to the writer.

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References

- BARLOW, H.S., 1982. 'An introduction to the moths of South-east Asia. Kuala Lumpur: The Malay Nature Society. 305 pp.
- POPESCU-GORJ, A. and CONSTANTINESCU, A. 1977. Revision of the genus *Euclasta* Lederer (Lepidoptera, Pyraustinae). *Travaux du Museum d'Histoire Naturelle Gr. Antipa*. 18: 157-245.